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ABSTRACT

A study investigated and compared the instructional behaviors, class content, and class organization of kindergarten and first grade movement educators and traditional physical education teachers. Literature on this topic suggests that movement educators focus on indirect teaching methods, nontraditional classroom settings, student involvement, and a hierarchical curriculum based on Laban's motion factors (understanding and experimentation in relation to the elements of weight, flow, time, and space). Traditional programs in physical education are characterized by direct teaching methods, drills, development of sport skills, and large group activity. For the study, each of eight movement educators and five traditional physical education teachers was videotaped twice in instructional settings. Tapes were analyzed to determine the degree to which the lesson's content was or was not movement-oriented. Tapes were then coded to describe instructional behaviors, student behaviors, and class organizational patterns. The Cheffer's Adaptation of the Flander's Interaction Analysis System (CAFIAS) was used to describe student-teacher interaction. Findings indicated that movement educators stressed more divergence, creativity, experience with the dimensions of movement, cognitive understanding of movement, and self-direction than did traditional teachers. No significant difference was found in class organization. (JD)

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THE INSTRUCTIONAL BEHAVIORS, CLASS CONTENT, AND CLASS ORGANIZATION OF MOVEMENT EDUCATORS: RELATIONSHIP TO MOVEMENT EDUCATION THEORY AND COMPARISON TO TRADITIONAL PRACTICE

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THE INSTRUCTIONAL BEHAVIORS, CLASS CONTENT, AND CLASS ORGANIZATION OF MOVEMENT EDUCATORS: RELATIONSHIP TO MOVEMENT EDUCATION THEORY AND COMPARISON TO TRADITIONAL PRACTICE

BY BARBARA L. WRIGHT

Since 1968, when the Physical Education Division of the American Association for Health, Physical Education and Recreation (AAHPER) sponsored a Conference for Teachers and Supervisors of Elementary School Physical Education, there has been a growing emphasis on "movement education" in elementary school physical education. One important aspect of the movement education approach to physical education is that it emphasizes a different style of teacher behavior than do the "more traditional" programs. Barrett (1971) stated that movement education programs were characterized by: (1) successful participation; (2) problem-solving or indirect teaching methods; (3) movement analysis, utilizing Laban's principles of movement; and (4) a hierarchial curriculum beginning with basic movement and progressing to fundamental skills and culminating with specialized skills.

Recent studies by Anderson and Barrette (1978), Batchelder (1975), and Cheffers and Mancini (1978) indicated that physical education teachers tend to display similar instructional behaviors, regardless of the grade level taught. The majority of physical educators teach directly, and their dominant modes of communication are lecture and direction-giving. This style of teaching has been commonly referred to as "traditional" teaching in physical education literature.

If one were to compare movement education and traditional physical education teachers in classroom settings, theoretically one would find that movement education teachers (1) use more indrect forms of verbalization (questioning); (2) stress success in their lessons (allow for individual differences);

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(3) use Laban's motion factors to analyze movement (weight/force, flow, time, and space); (4) stress basic movement as the foundation structure of curriculum; and (5) use more problem-solving and guided discovery methods of teaching than do traditional physical educators.

Movement education is an approach to elementary school physical education, in which children explore movement and teachers praise creative movement responses. Movement education lacks a highly competitive atmosphere and stresses the understanding of movement through the use of less teacher-directed methods. On the other hand, programs that are characterized by competition, direct teaching, single correct movement responses, mass or large group activity, teacher demonstration, and repetition or skill drill are referred to as traditional programs in this study.

Traditional programs stress seasonal activities which have historically been the focus of physical education programs at both the elementary and secondary levels. Sports, such as volleyball, basketball, baseball, and football, are introduced at the elementary level and continually revisited throughout high school. The teacher demonstrates and explains the skills, then students practice. These traditional classes are teacher-centered, and provide organized and controlled environments in which teaching progresses at a certain pace. The primary focus is on the learning of specific skills and direct teaching methods are utilized to achieve mass goals at a rapid rate. There is little time for exploration, creativity, or diversity in a strictly traditional program. One may encounter traditional programs which show elements of movement education, but these programs will lack the basic movement foundation.

Traditional programs in elementary school physical education are

characterized by an emphasis on the following: (1) direct teaching methods (lecture, demonstration); (2) drills and practices where one repeats the skills and strives for perfection; (3) skills that are traditionally a part of our heritage and relate to the areas of sports, dance, and gymnastics; (4) teacher-centered classes, where the class moves at one pace and as a unit; (5) large group activity; and (6) analysis of skills in relation to the particular sport being taught that day.

Since these two approaches are so dissimilar, teacher preparation institutions have developed different foci in curriculum and methods courses related to elementary school physical education. As indicated in a recent survey (American Alliance for Health, Physical Education and Recreation, 1978), some colleges and universities have a pure movement education approach in their courses, while others are either traditional or a combination of both.

The development of movement education, both conceptually and programmatically, has become the focus of several recent studies. These studies generally examine the degree to which children in movement education classes improve in skill, knowledge, and/or attitude, as compared to a control group in a traditional program. The difference between the control and experimental groups has been distinguished by teaching method. There have been no studies that describe the instructional behavior of a movement educator. However, movement education theorists predict differences between the instructional behaviors of movement educators and traditional teachers.

Recently, educators have turned toward descriptive-analytic research to examine the teaching process. A vast array of systematic observational instruments have been developed which provide a means for identifying, classifying, and recording teaching-learning behaviors in the classroom.

Interaction analysis systems have been used to categorize and record both verbal and nonverbal practices. Information gathered from such descriptive studies of instructional behavior have generated information related to the current state of the art of teaching. Some studies of instructional behavior have been completed in physical education. The results are fairly conclusive and indicate that physical education teachers use predominantly direct instructional behaviors. No such studies have been completed to describe the instructional behavior of movement educators.

The instructional behavior of movement educators was the focus of this study. In an effort to examine and describe the movement educator, instructional behavior and lesson content were examined. This study focused on primary physical education classes (K, 1) because the content unique to movement education would be most easily observed with this age group when compared to the traditional program.

Statement of Problem

The physical education literature presents a rather consistent theory of movement education. According to Barrett (1971), prominent authors writing about movement education agree that movement education is characterized by (1) successful participation; (2) problem-solving, or indirect methods of teaching; (3) analysis of movement according to Laban's Principles of Movement; and (4) a hierarchial curriculum beginning with basic movement, progressing to fundamental skills, and culminating with specialized skills. The literature has hypothesized that movement educators display certain behaviors and present a unique content to students. From the literature, it seems reasonable to assume that movement educators might (1) use varied verbal and nonverbal behaviors, (2) be more positive toward students, (3) use more basic movement

terminology when analyzing movement, and (4) stress basic movement as content in the primary grades (K, 1).

To date, there is no empirical evidence that supports these descriptors of movement educators. There have been no studies that have described or have attempted to validate descriptions of movement educators found in the literature.

The literature suggested that movement educators focus on indirect methods of teaching, nontraditional classroom settings, student involvement within the lesson, and a hierarchial curriculum founded in basic movement (understanding and experimentation in relation to the elements weight, flow, time, and space). What is unknown is the extent to which movement educators employ behaviors consistent with the movement education literature and theory.

Additionally, when someone is identified as a movement educator, there is no clear agreement about what that individual's teaching methods, class organization, or class content should be. In fact, there are no empirical data to describe what it means to be a movement educator. In this study, movement educators were identified and videotaped in an effort to describe their instructional behavior, class organization, and class content.

Purpose of the Study

The purpose of this study was to examine and describe selected dimensions of movement educators. The particular dimensions this study addressed were (1) the instructional behaviors of a movement educator, (2) the organizational structure of classes taught by movement educators, and (3) the content of primary lessons taught by movement educators.

The following questions served as guidelines for this inquiry.

1. To what extent does the instructional behavior of movement educators reflect those behaviors described in the literature?

2. To what extent do movement educators employ non-traditional organizational structures in the gymnasium?

3. To what extent is basic movement content the focus in primary physical education classes taught by movement educators?

4. To what extent do movement educators stress cognitive understanding of basic movement vocabulary?

5. To what extent do movement educators encourage divergence in their classes (cognitive and motor)?

6. To what extent do movement educators employ instructional behaviors, class organizational structures, and class content as prescribed in the literature?

A secondary purpose of this study was to compare and contrast movement educators and traditional physical educators with regard to their instructional behaviors, class organization, and class content. The question that served as a guideline for this inquiry was to what extent is the instructional behavior, class content, and class organization of movement educators different from that of traditional teachers?

Design of Study

This study included several phases:

1. The first phase was to identify movement educators and traditional teachers who were teaching in elementary schools in northeastern Ohio.

2. After the exemplary models were identified, 13 teachers were able to serve as the sample population for this study (eight movement educators and five traditional physical education teachers).

3. Each of the 13 teachers was videotaped twice in instructional settings.

4. The videotapes were analyzed by a panel of three judges. These judges analyzed the tapes to determine the degree to which the content of the lesson

was or was not movement-oriented. An analysis of content, system devised by the researcher, was used by the judges (see Chapter III). The tapes were coded in an effort to describe instructional behaviors, student behaviors, and class organizational patterns.

5. Finally, the movement educators and traditional teachers were compared to identify similarities and differences in instructional behaviors, class organization, and class content.

Procedures

Analysis of Content

A review of literature indicated that the teacher's role and the manner in which the teacher taught content should be different for movement educators and traditional physical educators. There were several instruments available which one might use to examine and/or describe similarities and differences between teachers and their behavior. However, there was no research to suggest a method by which one could determine differences in the content or focus of a physical education lesson. Therefore, the researcher developed a simple tool to describe the similarities and differences in the content of lessons taught by traditional physical educators and movement educators. Twelve content characteristics were identified and reviewed by a panel of experts and a sign system to analyze content was designed.

The 12 characteristics for describing lesson content were as follows:

1. Children are encouraged to be inventive, creative, and/or divergent in their movement responses (i.e., find as many ways as you can to absorb force or move through space and change directions, pathways, etc.).

2. Children are encouraged to be convergent in their movement (motor) responses (i.e., find the best way to throw), so all children perform the

same way--trying to emulate skilled performers.

3. Children are learning about the dimensions of movement (i.e., body shapes, body actions, flow, directions, body parts, relationships, etc.) through experimentation with variety, quality, and clarity of movement.

4. Children are engaged in calisthenics or warm-up exercises as a preliminary activity before what appears to be the lesson focus for the day.

5. Lesson emphasizes learning (cognitive, affective) related to what the body can do, how the body can move, where the body can move, and relationships which can occur in the lesson.

6. Lesson focuses on a particular piece of equipment (i.e., hoops, ropes, benches, etc.) and what one can do with it, etc., rather than focusing on movement dimensions related to the body and the equipment (i.e., "how many different things can you do with the hoop," not "move the hoop around different body parts").

7. Children are self-directed (free to find their own solutions to problems posed by the teacher), yet are working within the framework of the movement problem.

8. Lesson focuses on the learning of skills necessary to play a particular game or do a particular dance, etc., during the lesson or in the near future.

9. Children experience different positions, movements, and situations where mechanical laws, principles are brought to their attention (i.e., support, suspension, gravity, force production, etc.).

10. Lesson vocabulary focuses on a particular skill/game/dance or gymnastic activity being taught that day, and cues on how to refine that activity or skill (i.e., pushups--keep back straight) are given by the teacher. (Children learn name of skills, game.)

11. Children are learning to plan and order movements into repeatable sequences, using various dimensions of movement.

12. Children and/or teacher alter the environment, arrangement of equipment, type of equipment, etc., in relation to movement idea being developed.

The 12 content characteristics were arranged into a sign system based on 30 one-minute intervals. Once the tapes had been collected, they were coded by three judges, using the analysis of content interval sign system.

Selection of an Interaction Analysis System

The Cheffer's Adaptation of the Flander's Interaction Analysis System (CAFIAS) was developed for the purpose of describing student-teacher interaction in physical education classes.

According to Cheffers (1979), CAFIAS consists of Flander's, with the following changes:

1. It provides a device for the coding of nonverbal behaviors.
2. It provides diversification of the agency responsible for performing the teaching function (teacher, students, local environment).
3. It permits the coding of the class as one unit, a small group (or individual), or with no teacher influence. (p.37)

Given that CAFIAS was designed for use in physical education settings, and provided a device for the coding of nonverbal behaviors, teaching agent, and class structure, it was selected for use in this study. The literature describing movement education indicated that the teacher should use more questioning behaviors, teacher praise, and indirect methods of teaching. To completely describe these behaviors, the researcher felt it was essential to record the verbal and nonverbal behaviors of the students and teachers in this study. The literature on movement education also stated that students are

more actively involved in lessons taught by movement educators. An increase in student nonverbal behavior in physical education settings, according to CAFIAS, would indicate more student involvement in activity.

A professional coder was hired by the researcher to view each videotape and record the verbal and nonverbal behaviors of students and teachers according to the categories. Dr. Victor Mancini, Ithaca College, was hired to code the tapes. Reliabilities ranged from .99 to .90 for his coding of previous works using CAFIAS. In addition, Dr. Mancini has had extensive experience using CAFIAS, and has worked closely with John Cheffers.

The coding of the various CAFIAS categories were then arranged according to 31 CAFIAS parameters, so that the data could be reduced to more precise descriptions in terms of percentages and radios. The percentages represent the distribution of verbal, nonverbal, and total contributions for students and teachers, as well as the percentage of time classes were silent, confused, or engaged in various class structures. The percentage of time various teaching agencies were responsible for the instruction was also calculated. Ratios between teacher acceptance/praise and teacher direction-giving/criticism, teacher questioning and teacher lecturing, and pupil initiation at teacher suggestion and pupil initiation at student suggestion were calculated. CAFIAS parameter 31 (teacher empathy) was not used in this study because teacher empathy is no longer a CAFIAS parameter. The 31 parameters are described in Table 1. From the analysis of the tapes, ratios and percentages were calculated by combining the categories of CAFIAS (see Appendix A) and using various formulas recommended for CAFIAS.

Table 1

31 CAFIAS Parameters

Major Parameters	Statistic
Teacher Contribution, Verbal (1)	%
Teacher Contribution, Nonverbal (2)	%
Total Teacher Contribution (3)	%
Student Contribution, Verbal (4)	%
Student Contribution, Nonverbal (5)	%
Total Student Contribution (6)	%
Silence (7)	%
Confusion (8)	%
Total Silence and/or Confusion (9)	%
Teacher Use of Questioning, Verbal (10)	Ratio
Teacher Use of Questioning, Nonverbal (11)	Ratio
Teacher Use of Questioning, Total (12)	Ratio
Teacher Acceptance and Praise, Verbal (13)	Ratio
Teacher Acceptance and Praise, Nonverbal (14)	Ratio
Teacher Acceptance and Praise, Total (15)	Ratio
Pupil Initiation, Verbal (Teacher Suggestion) (16)	Ratio
Pupil Initiation, Nonverbal (Teacher Suggestion)(17)	Ratio
Pupil Initiation, Total (Teacher Suggestion) (18)	Ratio
Pupil Initiation, Verbal (Student Suggestion) (19)	Ratio
Pupil Initiation, Nonverbal (Student Suggestion) (20)	Ratio
Pupil Initiation, Total (Student Suggestion) (21)	Ratio

Table 1 (Cont'd.)

31 CAFIAS Parameters

Major Parameters	Statistic
Content Emphasis (Teacher Input) (22)	Ratio
Teacher (As Teacher) (23)	%
Other Students (As Teacher) (24)	%
The Environment (As Teacher) (25)	%
Verbal Emphasis (26)	%
Nonverbal Emphasis (27)	%
Class Structure (As One Unit) (28)	%
Class Structure (Group or Individualized) (29)	%
Class Structure (No Teacher Influence) (30)	%
Teacher Empathy to Student Emotions (31)	Freq. Count

Findings

The primary purpose of this study was to describe the instructional behaviors, class content, and class organization for movement educators in kindergarten and first grade classes. The data revealed some meaningful descriptions of movement educators which, to date, had been mere suppositions.

Results for the analysis of content indicate that movement educators emphasized divergence, self-direction, and Laban's elements of movement in their classes. Although other content characteristics were present, they did not occur with the same amount of emphasis.

Percentages and ratios for instructional behaviors which were described as being high for movement educators in this study include student talk, teacher use of questioning, teacher use of acceptance and praise, pupil initiation, lesson content, and the lack of silence. The scores for the remaining instructional behaviors were less dramatic.

Class organization, described as the structure of the class in either small groups or one unit were reported. Results indicated that movement educators had the classes working as one unit 80.71% of the time, and in small groups 19.29% of the time.

The second purpose of this study was to compare the movement educator with the traditional teachers. The data for movement educators were statistically compared with results for a group of traditional teachers to answer the question, do differences exist between the groups in instructional behaviors, class content, and class organization. To determine if differences existed in the lesson content for movement educators and traditional teachers, a panel of judges was employed. A 12-item analysis of content was used to analyze each lesson. No significant differences between movement and

traditional classes were found on the following content characteristics: emphasis of warm-ups, emphasis on learning (cognitively) the dimensions of movement, emphasis on the piece of equipment, emphasis of skills necessary to play a particular game, emphasis on mechanical principles, emphasis on correctional comments, emphasis on children planning and ordering movements, and emphasis on altering the learning environment.

Significant differences at the .05 level or beyond were obtained on the following characteristics.

1. Creativity and divergence. Movement educators emphasized creative and divergent movement responses more than traditional teachers.

2. Convergence. Traditional teachers emphasized children doing the same skills the same way more than movement educators.

3. Experiencing the dimensions of movement. Movement educators encouraged children to explore the various dimensions of movement more than traditional teachers.

4. Self-direction. Movement educators encouraged students to find their own solutions to problems posed by the teacher more often than traditional teachers.

5. Learning about the dimensions of movement. Movement educators used Laban's movement vocabulary to guide and reinforce, as children gained a better understanding of the movement dimensions.

No significant differences were found on the following CAFIAS parameters describing instructional behaviors: teacher talk, teacher nonverbal contribution, confusion, total silence and/or confusion, unstructured pupil-initiated verbal behavior, unstructured pupil-initiated nonverbal behavior; total pupil-initiated behavior (unstructured), teacher agency, total percent

of verbal behavior, and total percent of nonverbal behavior.

Significant differences at the .05 level or beyond were obtained on the following CAFIAS parameters.

1. Silence. Students in movement education classes experienced fewer periods of silence or waiting than students in traditional classes.

2. Student talk. Children engaged in talk more frequently in movement education classes than did children in traditional classes.

3. Teacher use of questioning. Movement educators used more verbal and nonverbal questioning behaviors than the traditional teachers.

4. Teacher acceptance and praise. Movement educators exhibited more verbal and nonverbal reinforcing behaviors than traditional teachers.

5. Pupil initiation--teacher suggestion. Students in movement education classes received significantly more pupil initiation at teacher suggestion, both verbal and nonverbal, than students in traditional classes.

6. Content cross. Traditional teachers emphasized content through fact-giving, demonstrations, and opinions more than movement educators.

Class organization was compared to determine which group of teachers had children work alone or as one unit more frequently. There were no significant differences between the two groups of teachers in terms of class organization.

The results indicate that significant differences between movement and traditional teachers were observed on selected instructional behaviors and characteristics of content. No significant differences were found on organizational structure.

Conclusions

On the basis of the sample, methods, and data presented in this study, the following conclusions about movement educators are drawn.

1. Movement educators consistently emphasize instructional behaviors congruent with the intent of movement education described in the literature by movement education theorists.

2. Movement educators consistently emphasize content congruent with the curricular intent of movement education theory.

Movement education theorists state that content selection and instructional procedures are two component characteristics that distinguish a movement education approach from a traditional approach. According to research by Barrett (1971), the movement approach to physical education is characterized by the following: (1) indirect instructional methods; (2) successful learner participation; (3) content based on Laban's movement elements; (4) learning experiences in the cognitive, motor, and affective domains; and (5) basic movement content as the foundation for a hierarchial curriculum. Two conflicting conceptions of movement education appear in the literature. On the one hand, there are those who describe movement education as no more than a method of teaching. On the other hand, there are those who describe movement education as an approach to physical education with a distinct body of knowledge which is implemented through the use of a variety of teaching methods. Until this study, there was no concrete evidence to support one position or the other. This study clearly indicates that movement education is a blend of content and instruction and is, therefore, a curricular approach, not solely a teaching method. The fact that movement education emphasizes divergent responses in relation to the dimensions of movement is perhaps the reason for confusing this approach with a method of teaching.

This study also presents data comparing the instructional behaviors, class

content, and class organization of movement educators and traditional teachers.

1. Movement educators and traditional teachers are significantly different on many aspects of instructional behavior. Movement educators have fewer periods of silence, more student talk, more student questioning, more teacher acceptance and praise, and more student-initiated behaviors at teacher suggestion than traditional teachers. Traditional teachers gave more facts, opinions and demonstrations related to lesson content. These results indicate that the learning opportunities and the meaning of movement are substantially different for the two types of classrooms. This suggests that difference previously assumed to exist do indeed exist.

2. Differences in the characteristics of class content also exist between the two types of teachers. Movement educators stress more divergence, creativity, experience with the dimensions of movement, cognitive understanding of the dimensions of movement, and self-direction than traditional teachers. The traditional teachers emphasize more convergent responses, calisthentics, and exploration of equipment than movement educators. Since differences do exist in the emphasis of various content characteristics, it can be assumed that the children learn different concepts, experience different activities, and derive a different movement vocabulary in each program. However, this would need to be tested in future studies. The movement educators in this study had obviously revamped the curriculum and organized it around a content unique to elementary school physical education. Kindergarten and first grade children in movement education classes are exposed to different learning experiences.

Movement education theorists have stated that basic movement (the dimensions of movement) is the foundation for a hierarchial curriculum in movement education, and that this content dictates the need for more indirect methods of teaching.

The data in this study clearly indicate that these criteria were met by the movement education teachers. This further supports the notion that movement education is a unique approach to physical education, and that it is firmly grounded in the presentation of basic movement content through the use of varied teaching methods.

It is also important to note that there are philosophical differences implicit in each program. Movement education places more value on active participation, student input, creativity, positive reinforcement, and the understanding and application of broad concepts to the field of physical education. Traditional programs value the teachers' opinions, facts, perfection of selected skills, calisthenics, and student control.

APPENDIX A

CAFIAS

Categories of Cheffers' Adaptation of Flanders' Interaction Analysis System
(Cheffers, Amidon, & Rodgers, 1974)

Categories	Verbal	Relevant Behaviors	Nonverbal
2-12	2 Praises, commends, jokes, encourages.	Face:	12 Smiles, nods with smile (energetic), winks, laughs.
		Posture:	Claps hands, pats on shoulder, places hand on head of student, wrings student's hand, embraces joyfully, laughs to encourage, spots in gymnastics, helps child over obstacles.
3-13	3. Accepts, clarifies, uses, and develops suggestion and feelings by the learner.	Face:	13 Nods without smiling, tilts head in empathetic reflection, sighs empathetically.
		Posture:	Shakes hands, embraces sympathetically, places hand on shoulder, puts arm around shoulder or waist, catches an implement thrown by student, accepts facilities.

Categories of Cheffers' Adaptation of Flanders' Interaction Analysis System
(Cont'd.)

Categories	Verbal	Relevant Behaviors	Nonverbal
	4		14
4-14	Asks questions requiring student answer.	Face:	Wrinkles brow, opens mouth, turns head with quizzical look.
		Posture:	Places hands in air, waves finger to and fro anticipating answer, stares awaiting answer, scratches head, cups hand to ear, stands still half-turned towards person, awaits answer.
	5		15
5-15	Gives facts, opinions, expresses ideas, or asks rhetorical questions.	Face:	Whispers words inaudibly, sings, or whistles.
		Posture:	Gesticulates, draws, writes, demonstrates activities, points.
	6		16
6-16	Gives directions or orders.	Face:	Points with head, beckons with head, yells at.
		Posture:	Points finger, blows whistle, holds body erect while barking commands, pushes child through a movement, pushes a child in a given direction.

Categories of Cheffers' Adaptation of Flanders' Interaction Analysis System
(Cont'd.)

Categories	Verbal	Relevant Behaviors	Nonverbal
	7		17
7-17	Criticizes, expresses anger or distrust, sarcastic or extreme self-reference.	Face:	Grimaces, growls, frowns, drops head, throws head back in derisive laughter, rolls eyes, shakes head.
		Posture:	Hits, pushes away, pinches, grapples with, bangs table, damages equipment, throws things.
	8		18
8-18	Student response that is entirely predictable, such as obedience to orders, and responses not requiring thinking beyond the comprehension phase or knowledge (after Bloom).	Face:	Poker face response, nod, shake, gives small grunts, quick smile.
		Posture:	Moves mechanically to questions or directions, responds to any action with minimal nervous activity, robot-like.

Categories of Cheffers' Adaptation of Flanders' Interaction Analysis System
(Cont'd.)

Categories	Verbal	Relevant Behaviors	Nonverbal
	9		19
9-19	Pupil-initiated talk that is purely the result of the pupil's initiative and that could not be predicted.	Face: Posture:	Interrupting sounds, gasps, sighs. Puts hands up to ask questions, gets up and walks around without provocation, begins creative movement education, makes up own games, makes up own movements, shows initiative in supportive movement, introduces new movements into games not predictable in the rules of the game.
	10		20
10-20	Stands for confusion, chaos, disorder, noise, much noise.	Face:	Silence, children sitting doing nothing, noiselessly awaiting teacher just prior to teacher entry, etc.

Note: Coding symbols are as follows: Teacher (T) Environment (E) Student (S).

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